

**II. AMENDMENTS TO THE CLAIMS:**

Please amend the claims as follows:

- **Please cancel claims 1-5.**
  - **Please rewrite claims 6-10 as follows:**
6. (Currently Amended) A switched reluctance machine, comprising:
- a rotor defining a plurality of salient rotor poles substantially equally spaced about the rotor, each rotor pole having a pole face construction and defining an angular width, wherein the angular width of the rotor pole with the widest width is:
    - (a) substantially equal to or greater than the angular width of the rotor pole with the narrowest width, and
    - (b) less than 1.5 times the angular width of the rotor pole with the narrowest width;
  - a stator defining at least one pair of salient stator poles, the stator poles of the at least one pair being radially opposed to one another and having substantially the same pole face construction as one another;
  - a phase winding for energizing the at least one pair of stator poles over a plurality of discrete intervals, the energizing of the phase winding producing a given desired output on the rotor and producing normal forces tending to cause movement of the energized stator poles towards the rotor;
  - wherein a first profile of the normal forces experienced by the at least one pair of stator poles over a first discrete interval is different from a subsequent profile of the normal forces experienced by the at least one pair of stator poles over a subsequent discrete interval.

7. (Currently Amended) The switched reluctance machine of claim 6, wherein the rotor defines a plurality of pairs of salient rotor poles, the salient rotor poles in each pair being radially opposed to one another, and wherein:

- a) over the first discrete interval, a first pair of rotor poles is brought towards alignment with the at least one pair of stator poles, each rotor pole of the first pair having a first pole face construction and a first angular width substantially similar to the other radially opposed pole of the pair;
- b) over the subsequent discrete interval, a second radially opposed pair of salient rotor poles is brought towards alignment with the at least one pair of stator poles, each rotor pole of the second pair having a second pole face construction and a second angular width substantially similar to the other radially opposed pole of the pair; and
- c) the first pole face construction of the rotor poles forming the first pair is different from the second pole face construction of the rotor poles forming the second pair.

8. (Currently Amended) The switched reluctance machine of claim 7, wherein the first angular width of the rotor poles forming the first pair is substantially the same as the second angular width of the rotor poles forming the second pair rotor poles.

9. (Currently Amended) The switched reluctance machine of claim 7, wherein a first maximum air gap established between the first pair of rotor poles and the at least one pair of stator poles is different from a second maximum air gap established between the second pair of rotor poles and the at least one pair of stator poles.

10. (Currently Amended) The switched reluctance machine of claim 7, wherein each of the rotor poles of the first pair having the first pole face construction defines a notched pole face.

- **Please cancel claim 11-13.**
- **Please rewrite claims 14-18 as follows:**

14. (Currently Amended) A switched reluctance machine, comprising:
- a rotor defining a plurality of salient rotor poles substantially equally spaced about the rotor, each rotor pole having a pole face construction and an angular width, wherein the angular widths of each of the rotor poles are substantially the same;
  - a stator defining a plurality of salient stator poles substantially equally spaced about the stator, the plurality of salient stator poles forming:
    - a first pair of salient stator poles being radially opposed to one another and having a first pole face construction substantially similar to one another, and
    - a second pair of salient stator poles being radially opposed to one another and having a second pole face construction substantially similar to one another;
  - at least one current carrying member for simultaneously energizing the first and second pairs of stator poles over a plurality of discrete intervals, the energizing of the current carrying member producing a given desired output on the rotor and producing normal forces tending to cause movement of the energized stator poles towards the rotor;
  - wherein a first profile of the normal forces experienced by the first pair of stator poles over one of the discrete intervals is substantially different from a second profile of the normal forces experienced by the second pair of stator poles over the same discrete interval.
15. (Currently Amended) The switched reluctance machine of claim 14, wherein the first pole face construction of the stator poles forming the first pair is different from the second pole face construction of the stator poles forming the second pair.

16. (Currently Amended) The switched reluctance machine of claim 15, wherein each of the stator poles of the first pair having the first pole face construction defines a notched pole face.
17. (Currently Amended) The switched reluctance machine of claim 16, wherein the pole face construction of each of the rotor poles is substantially the same.
18. (Currently Amended) A switched reluctance machine, comprising:
- a rotor defining a plurality of salient rotor poles, the plurality of salient rotor poles substantially equally spaced about the rotor and having substantially the same angular width as one another, the plurality of salient rotor poles forming:
    - a first pair of salient rotor poles being radially opposed to one another and having a first pole face construction substantially similar to one another, and
    - a second pair of salient rotor poles being radially opposed to one another and having a second pole face construction substantially similar to one another, the second pole face construction being different from the first pole face construction;
  - a stator defining a plurality of salient stator poles substantially equally spaced about the stator and having substantially the same pole face construction as one another, the plurality of salient stator poles forming a first pair of salient stator poles being radially opposed to one another and forming a second pair of salient stator poles being radially opposed to one another; and
  - at least one current carrying member for simultaneously energizing the first and second pairs of salient stator poles over a plurality of discrete intervals, the energizing of the at least one current carrying member producing a

given desired output on the rotor and producing normal forces tending to cause movement of the energized stator poles towards the rotor, wherein the first pair of rotor poles having the first pole face construction is brought towards alignment with the first pair of stator poles over one discrete interval;

wherein the second pair of rotor poles having the second pole face construction is brought towards alignment with the second pair of stator poles over the same discrete interval; and

wherein a first profile of the normal forces experienced by the first pair of stator poles over the one discrete interval is substantially different from a second profile of the normal forces experienced by the second pair of stator poles over the same discrete interval.

- **Please cancel claim 19.**
- **Please add new claims 20 as follows:**

20. (New) The switched reluctance machine of claim 6, wherein each of the stator poles forming the at least one pair defines a notched pole face.